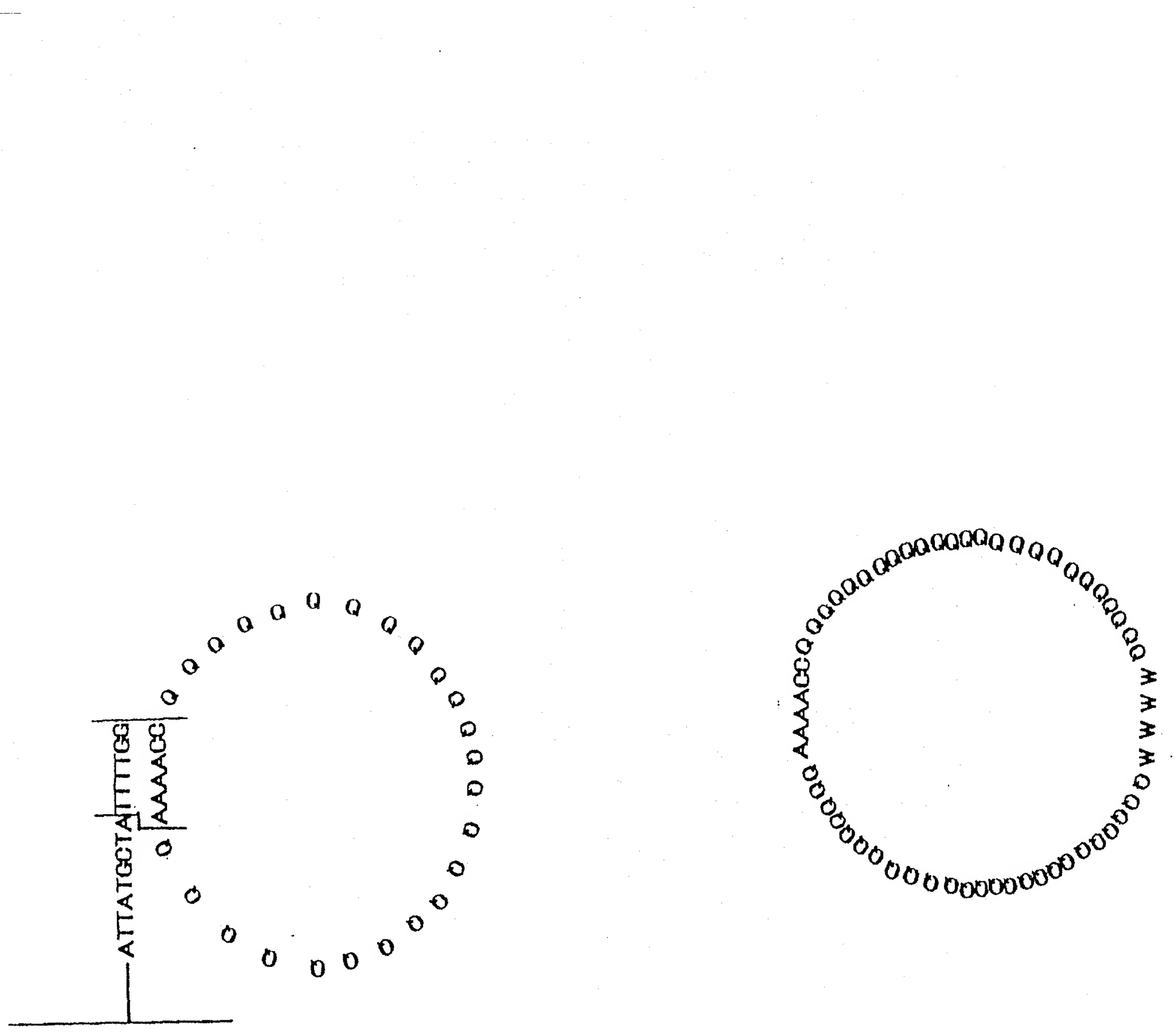
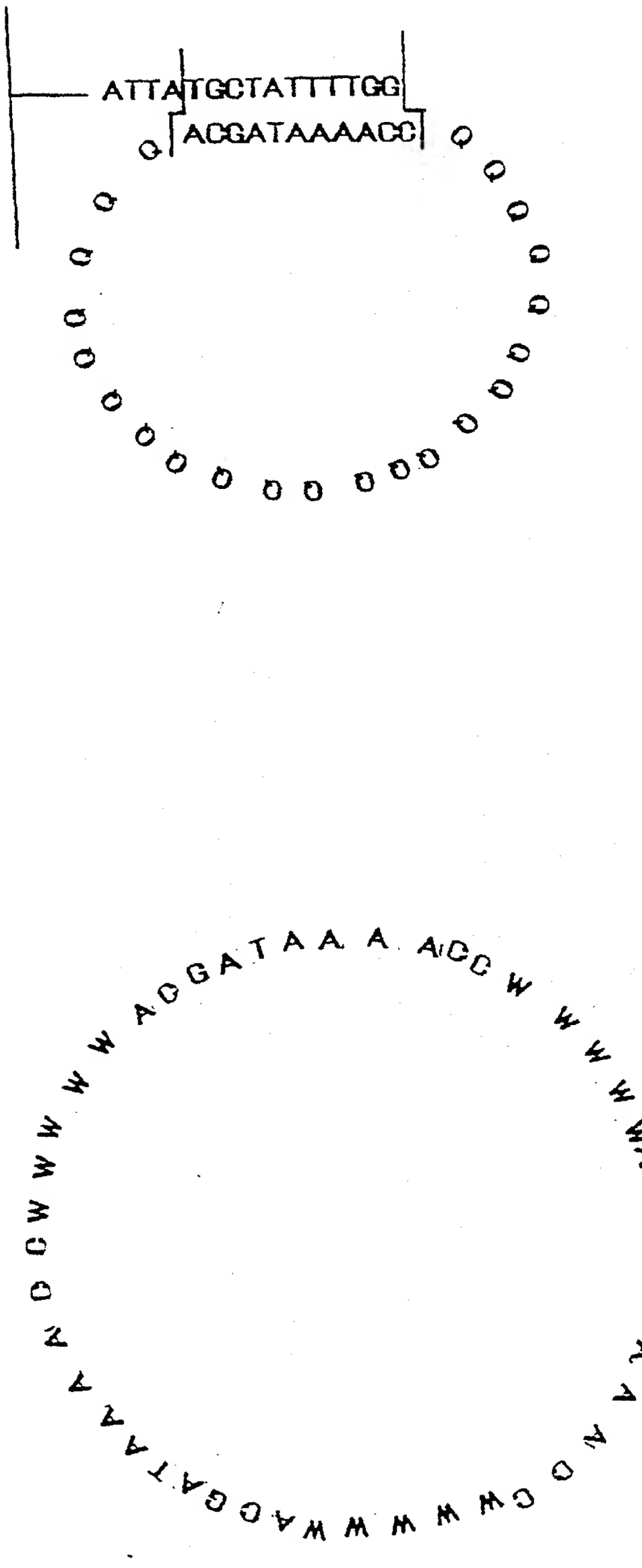
Figure 1A



0986779.062101

Figure 1B



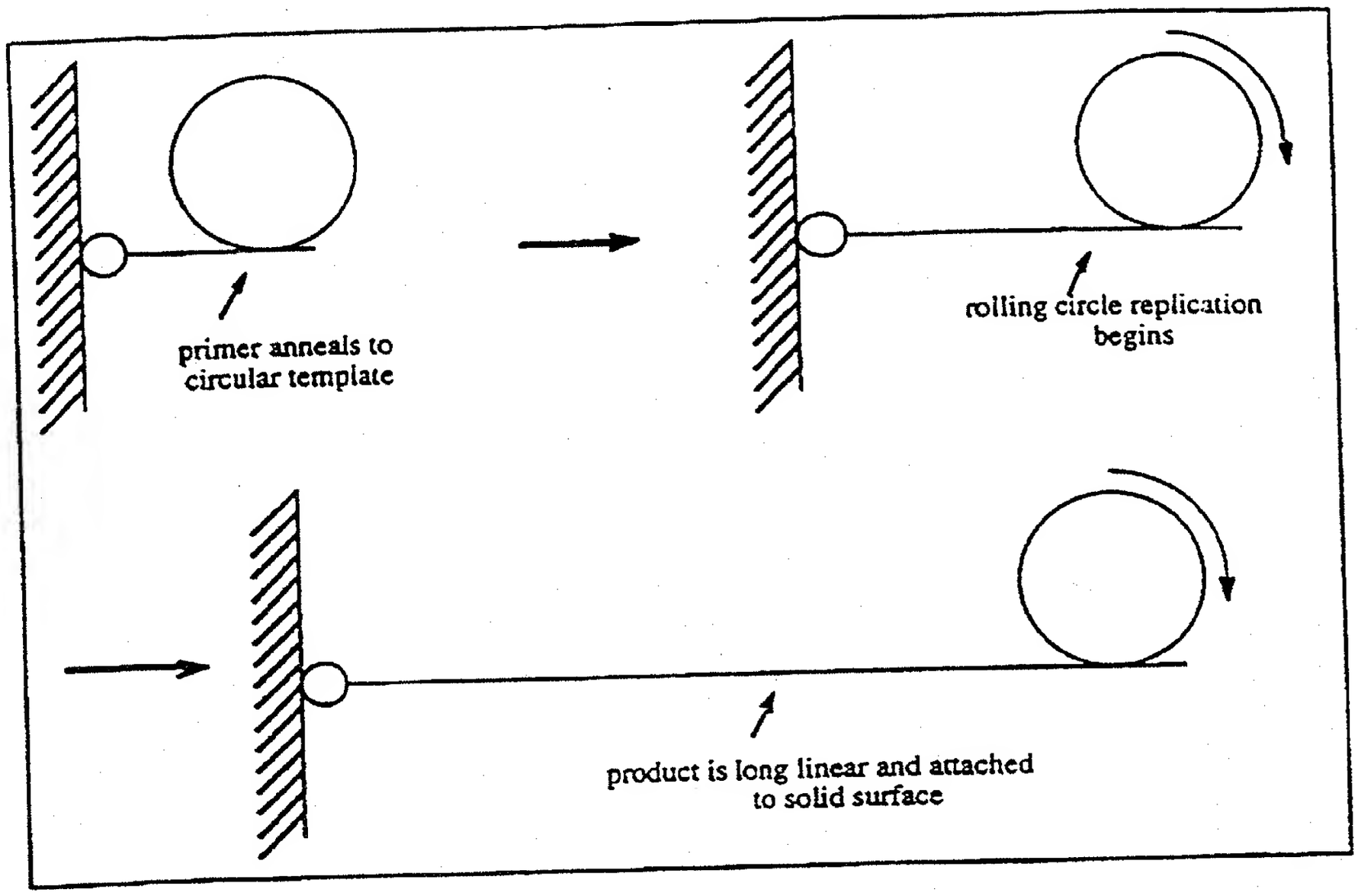

primer anneals to
circular template
rolling circle replication
begins
product is long linear and attached
to solid surface

FIGURE 2

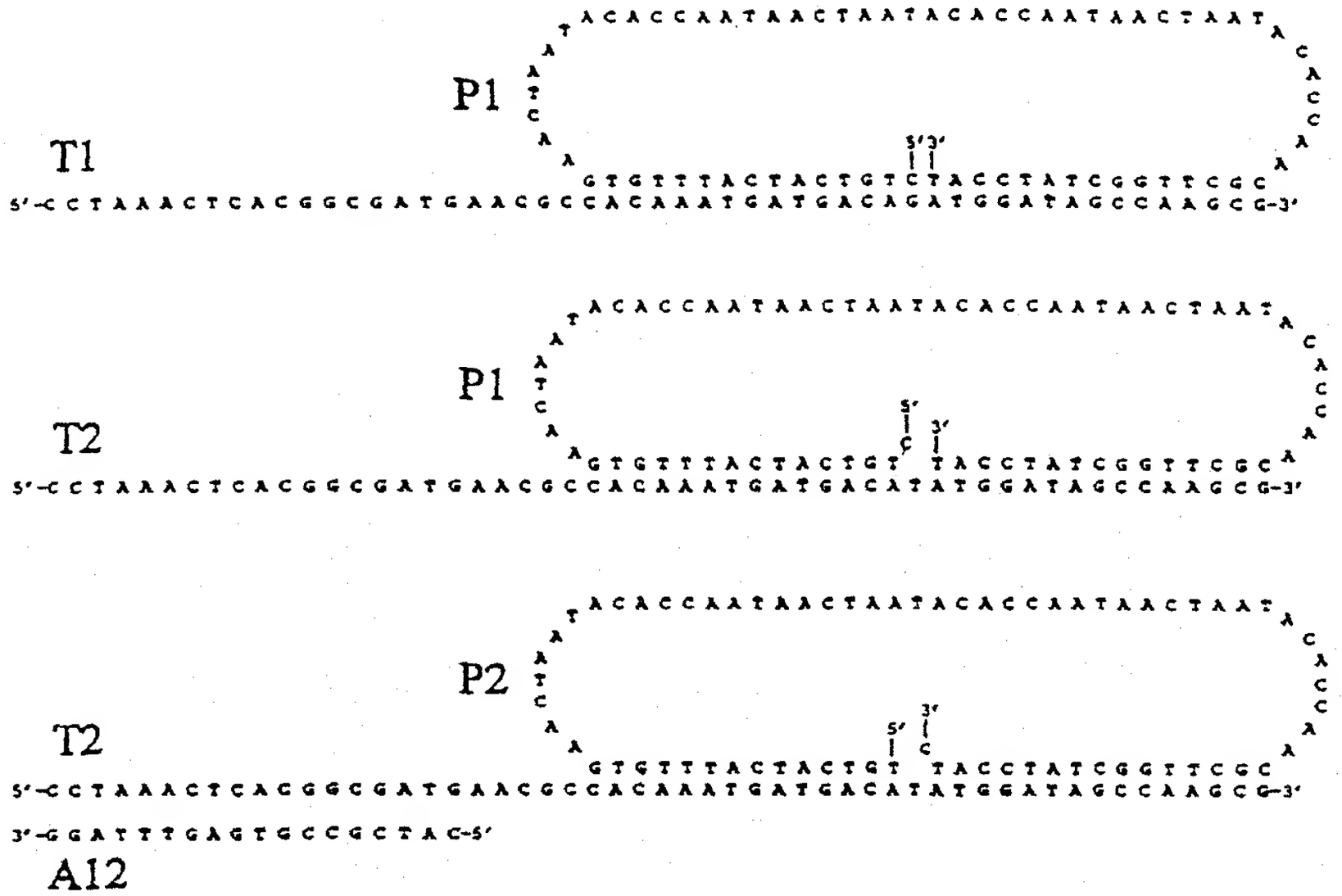
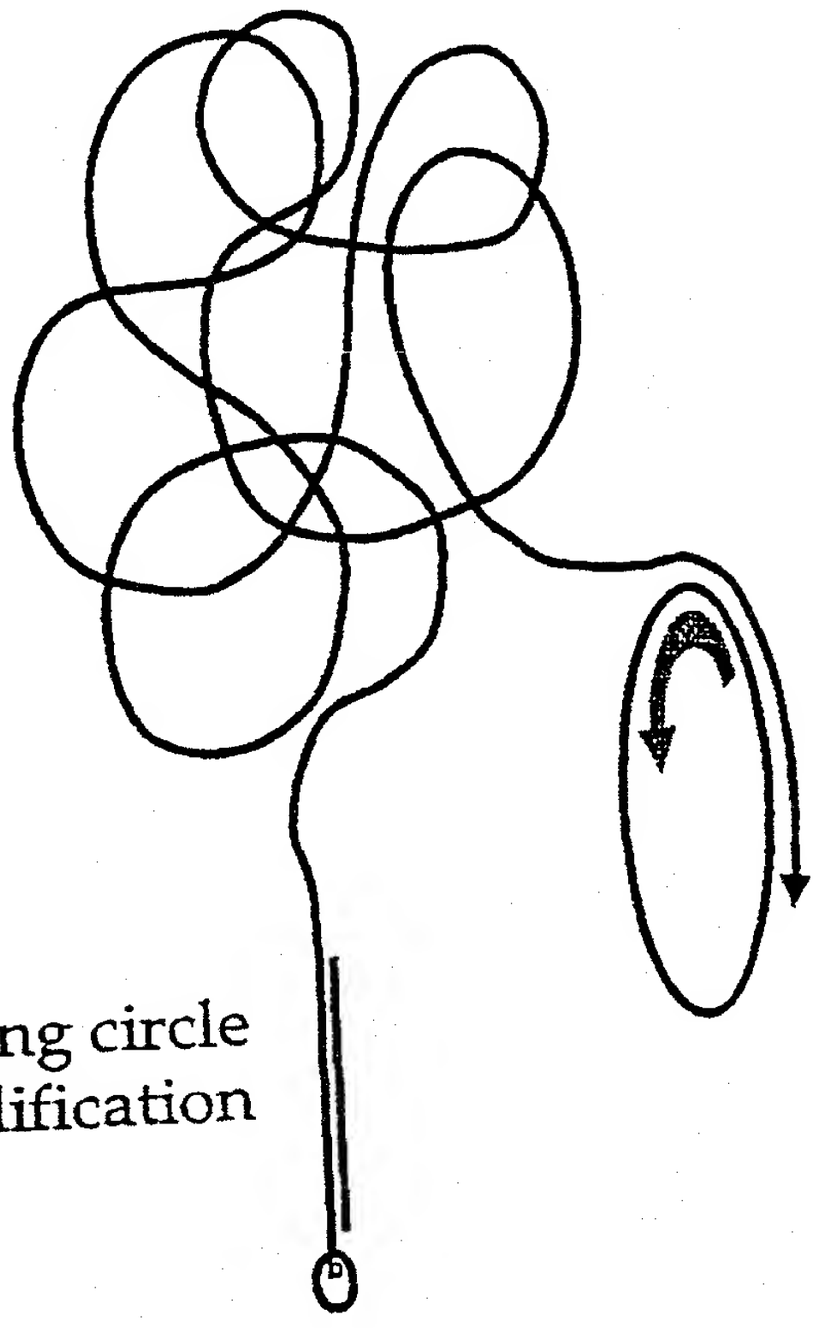

P1
T1
5'-CCTAAACTCACGGCGATGAACGCCACAAATGATGACAGATGGATAGCCAAGCG-3'
P1
T2
5'-CCTAAACTCACGGCGATGAACGCCACAAATGATGACATATGGATAGCCAAGCG-3'
P2
T2
5'-CCTAAACTCACGGCGATGAACGCCACAAATGATGACATATGGATAGCCAAGCG-3'
3'-GGATTTGAGTGCCGCTAC-5'
A12

FIGURE 3A

B



C

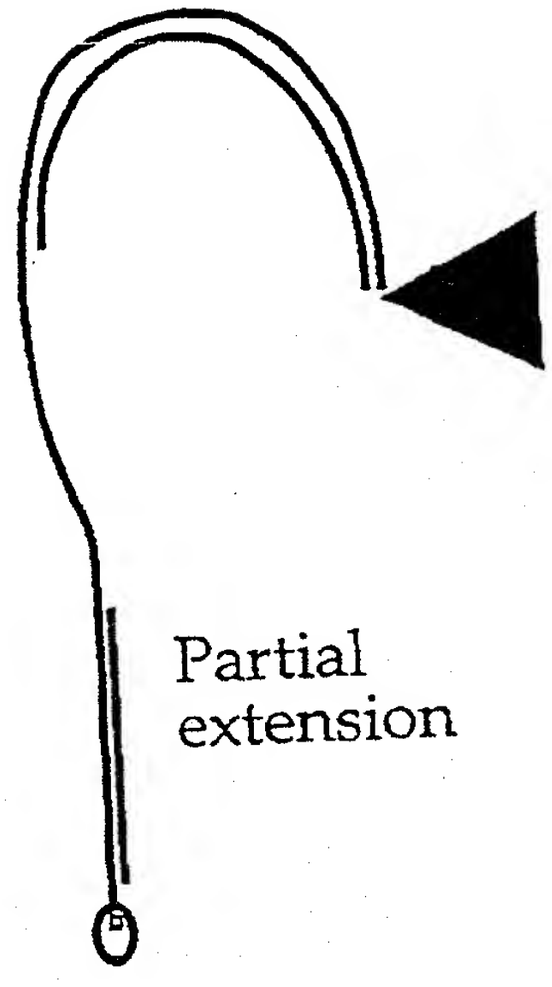


FIGURE 3B & 3C

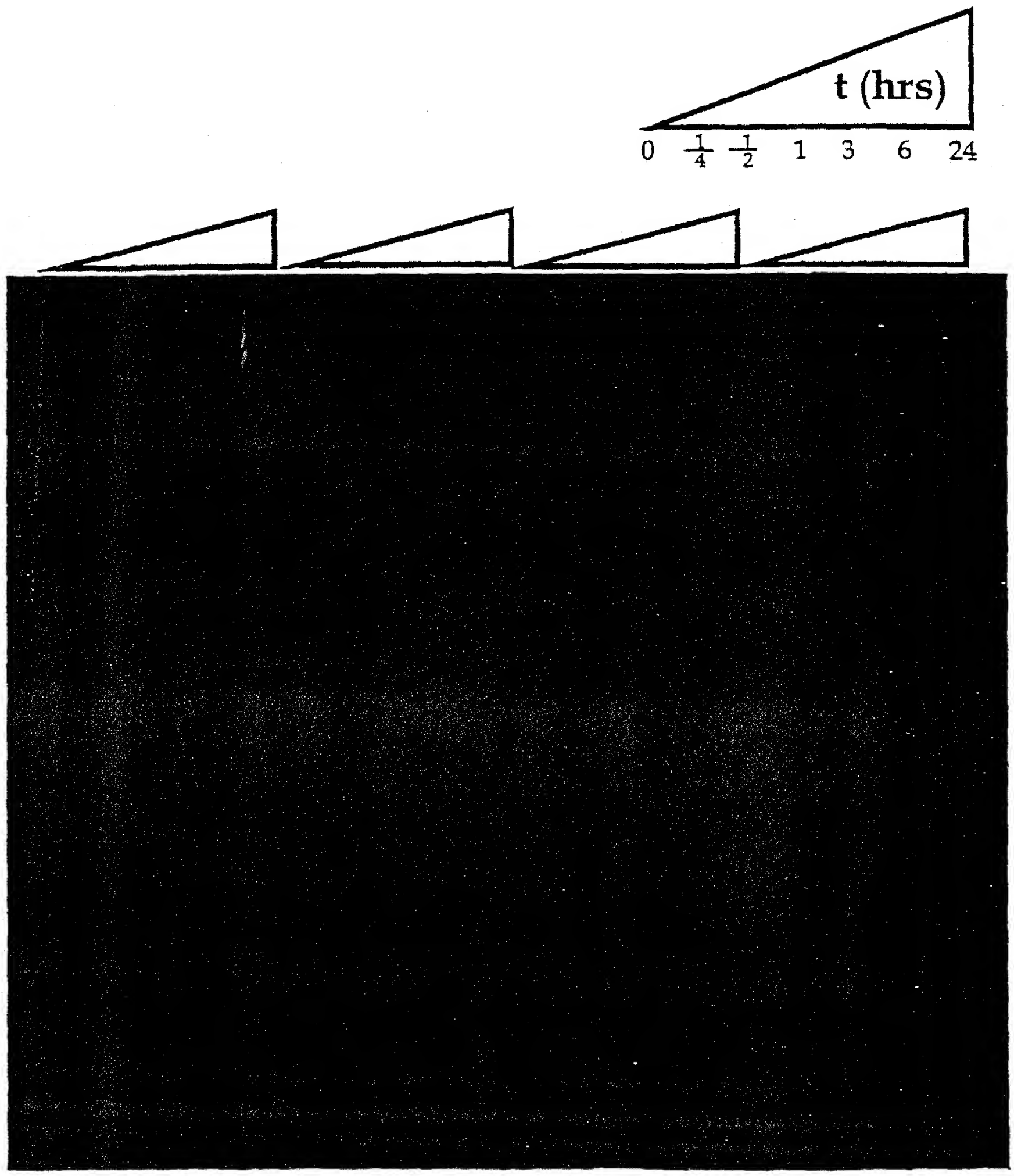


FIGURE 4A

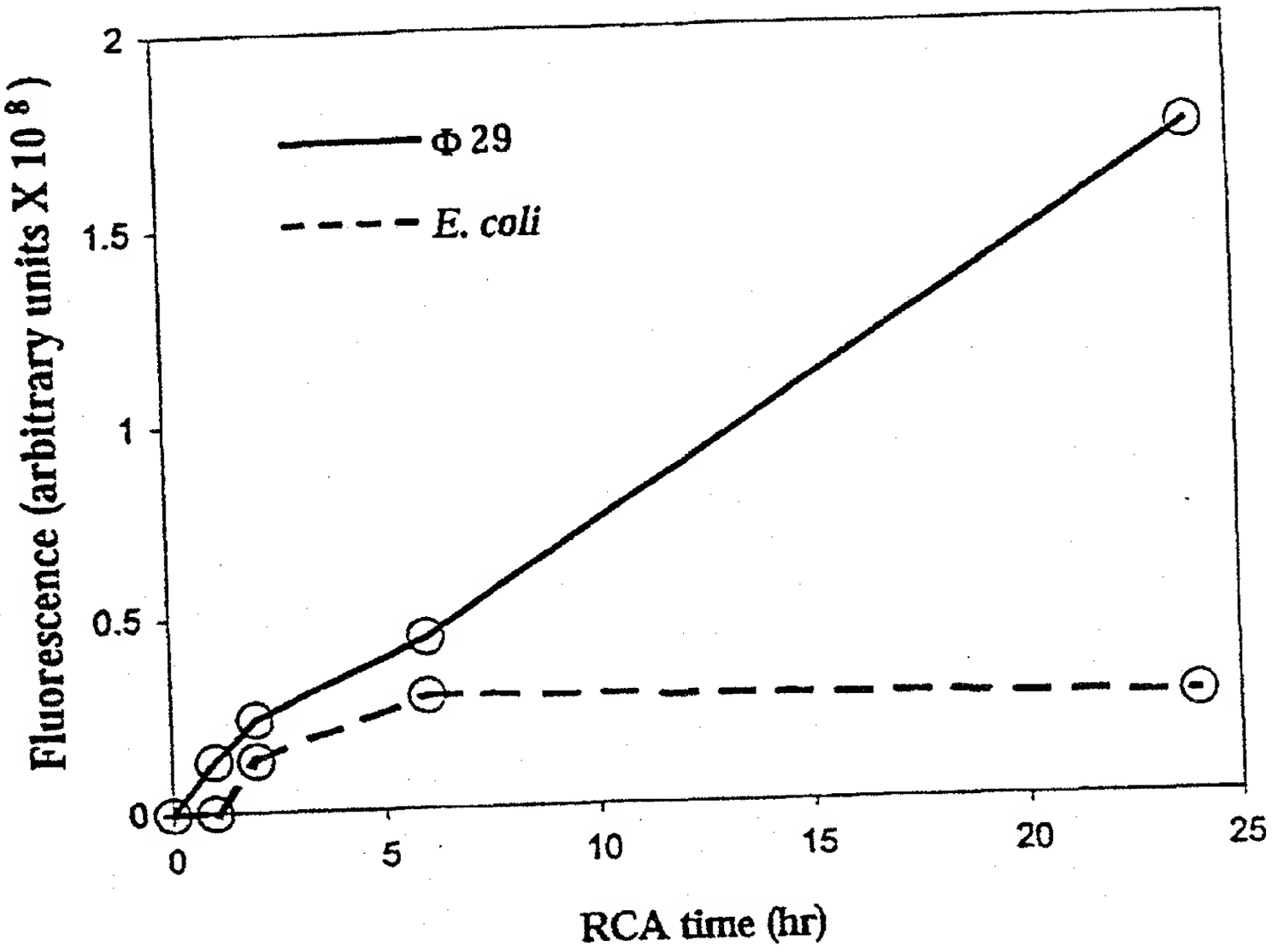
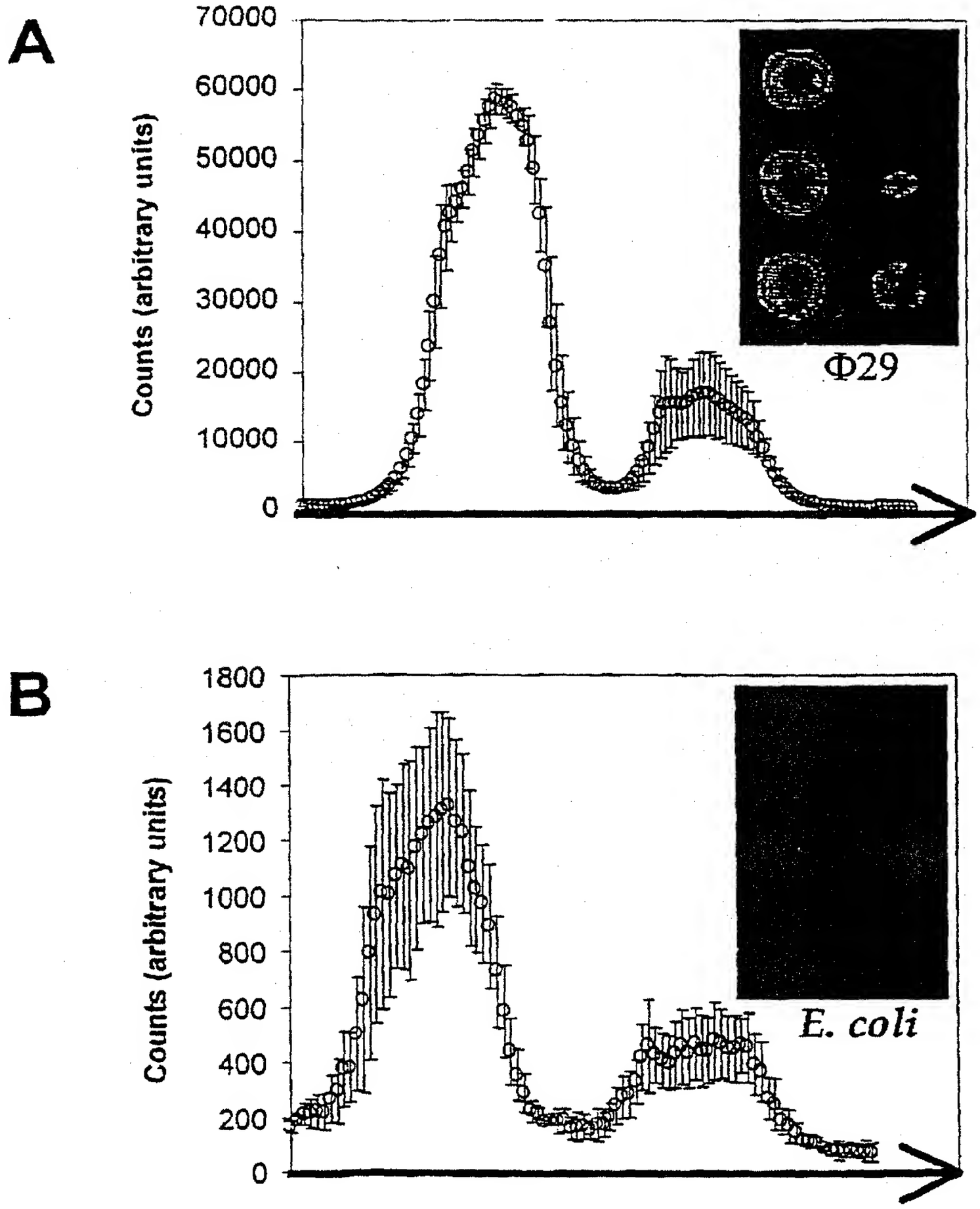

Fluorescence (arbitrary units X 10 ⁸)
2
1.5
1
0.5
0
Φ 29
E. coli
0
5
10
15
20
25
RCA time (hr)

FIGURE 4B

FIGURE 5


A
70000
60000
50000
40000
30000
20000
10000
0
Counts (arbitrary units)
Φ29
B
1800
1600
1400
1200
1000
800
600
400
200
0
Counts (arbitrary units)
E. coli

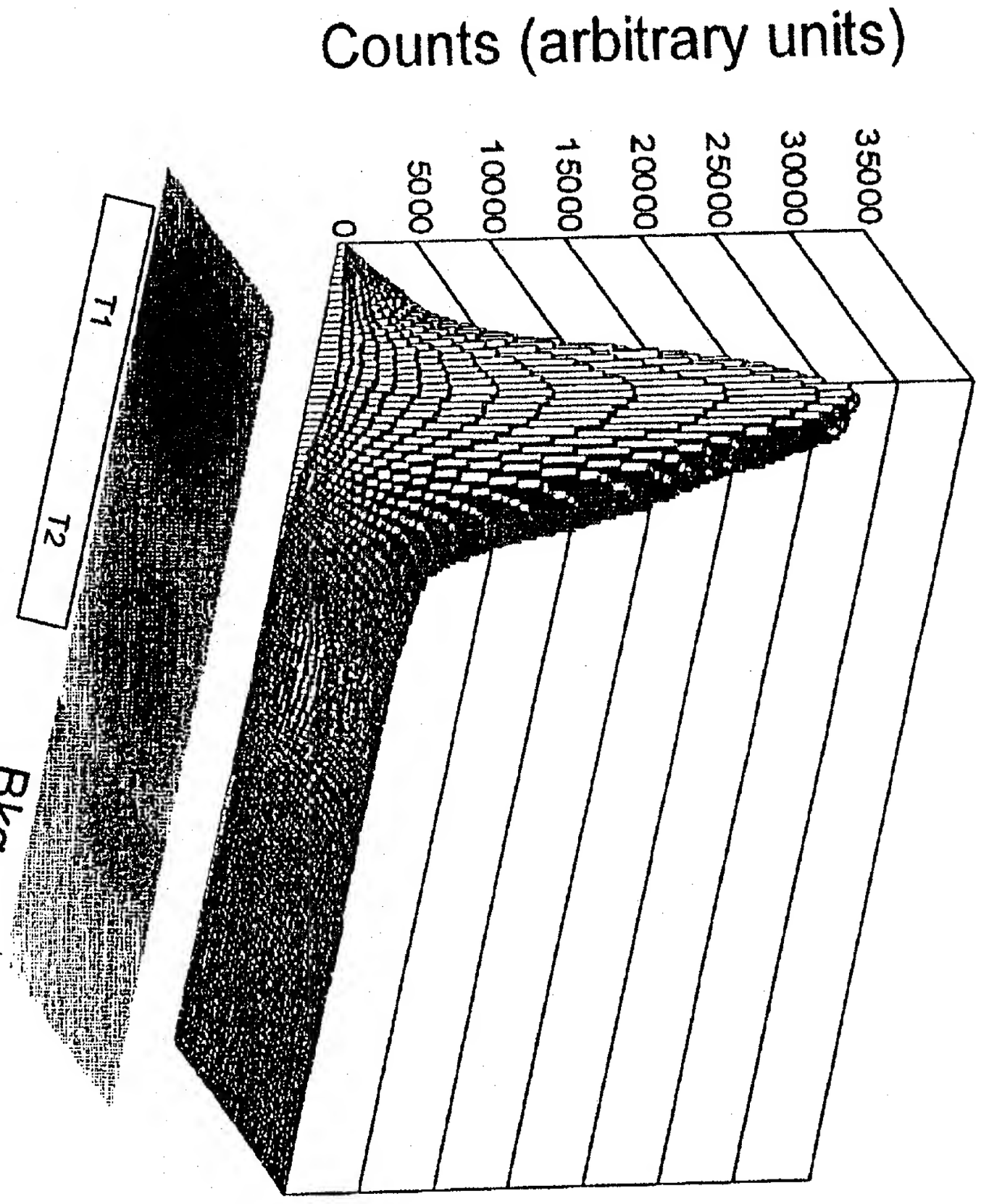

Counts (arbitrary units)
0
5000
10000
15000
20000
25000
30000
35000
T1
T2
Bkg.

FIGURE 6